

REMARKS/ARGUMENTS

Reconsideration of this application is respectfully requested in view of the foregoing amendments and discussion presented herein.

1. Rejection of Claims 98-99, 101-102, 132-133, and 135-136 under 35 U.S.C. § 102(b).

Claims 98-99, 101-102, 132-133, and 135-136 were rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 3,986,845 to Hotchkiss.

Claims 98-99 and 101-102 have been cancelled to expedite prosecution. Claim 132 has been rewritten into independent form.

Regarding Claim 132, the Examiner asserts:

[I]t is the examiner's position that the radial overlapping of the blades causes an inherent slight fraying in the cut cardboard strips. A perfect alignment of the blades would create a clean cut, but it is the examiner's position that the slight overlap would cause a difference in cut and therefore the strips would exhibit slight fraying.

Respectfully, Applicants submit that the Examiner's argument is improper and draws unwarranted conclusions. Perfect alignment of the blades, with no radial overlap, would produce scoring, rather than cutting the material (see, e.g., the discussion of Collier et al. in Section 2). Hotchkiss makes no statement regarding any such "slight fraying", and in fact, appears to teach away from any fraying in the description of the slicing operation.

In Hotchkiss, the knives "are laterally adjacent and radially overlap approximately 1/8 inch so that as the sheet material is passed therethrough, [] it is subjected to a slicing scissor-like action" (col. 3, ll. 42-45). Scissors, in common usage, provide a clean cut. Scissors are constructed of two halves that are joined at a pivot point with adjacent cutting blades. By the nature of this construction, the cutting blades of scissors must exhibit radial overlap, and are not in "perfect alignment". Therefore, the "scissor-like action" in Hotchkiss produces a clean cut, like scissors would, and not a frayed cut.

Moreover, Claim 132 requires that “significant” fraying be produced, not “slight” fraying. Even if Hotchkiss produced “slight fraying”, which it does not, Hotchkiss would still not anticipate the instant invention, as claimed. Thus, the rejection of Claims 132-133 and 135-136 under 35 U.S.C. § 102(b) must be withdrawn.

2. Rejection of Claims 100 and 134 under 35 U.S.C. § 103(a).

(a) Claims 100 and 134 are rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 3,986,845 to Hotchkiss in view of U.S. Patent No. 4,694,722 to Collier et al.

Collier et al. does not cure the deficiencies of Hotchkiss. All arguments made above are hereby incorporated into this section. Claim 100 has been rewritten into independent form.

At page 3 of the Office Action, the Examiner asserts:

Collier discloses a circular blade for cutting material that comprises a plurality of aligned teeth. The teeth cause a relatively narrow split or cut line, and also help prevent the edge of the blade from wearing out. It is the examiner’s position that the teeth are non-fluted, because they are aligned with one another and project radially outwardly from a circumferential edge of the blade. (citations omitted)

It would have been obvious to one of ordinary skill in the art at the time of invention by applicant to utilize the teeth of Collier on the blades of Hotchkiss in order to attain the advantages disclosed.

“Narrow split or cut line”. Referring to Applicant’s response to the January 3, 2007, Office Action, the “narrow split or cut line” provided in Collier is produced specifically because of the orientation of the blades. The Examiner’s kind attention is directed to Figure 4 of Collier, which shows two cutting wheels (32) and a workpiece (W) between them. Note, in Figure 3, that the cutting wheels (32) do not overlap in the slightest, but are oriented in a spaced-apart fashion to cut through opposing outer layers of the workpiece (W). Please refer also to column 5, lines 41-47, which specifically orients the cutting wheels:

As may be readily understood, the tool and cutter assemblies are releasably secured to their respective tool guides in relatively opposing, vertically aligned pairs so that the scores and cuts on the opposing surfaces are aligned with one another and even break lines are provided thereon.

Further, at column 6, lines 7-9:

[S]ince the teeth are aligned with one another, rather than being alternately offset, a relatively narrow split or cut line can be formed in the workpiece.

In Collier, the “relatively narrow split or cut line” is produced on each side of the workpiece (W) because the wheels do not overlap and the score line on each side is made by a single blade. This type of line is important for scoring a material (such as drywall or wallboard) for a clean break, but is meaningless in the context of Hotchkiss. Hotchkiss contains no teaching or indication that a “narrow split or cut line” is advantageous. In fact, the strips cut in the apparatus of Hotchkiss are subjected to a “transverse cutting mechanism” immediately after being sliced into strips. There is no advantage to any special narrow cut line in Hotchkiss, so this cannot serve as motivation to combine the cutting wheels of Collier with the apparatus of Hotchkiss.

“Prevent the edge of the blade from wearing out”. Referring again to Applicant’s response to the January 3, 2007, Office Action, Collier is concerned with blades wearing out because Collier is directed to scoring drywall or wallboard, which usually contains “gypsum or the like” (column 1, lines 6-12), and “wear[s] out straight knife blades rapidly” (col. 2, ll. 6-15). While blade wear is a significant concern with the scoring of wallboard, it is not a particular concern when cutting cardboard. The composition of cardboard is nothing like that of gypsum or like materials. The combination does not provide any recognizable advantage to Hotchkiss.

There are no advantages to using the cutting wheels of Collier in the apparatus of Hotchkiss. The stated advantages of Collier’s cutting wheels (in the Collier patent) are dependent on both the orientation of the wheels in Collier, which is significantly

different than in Hotchkiss, and the material used in Collier, which is also significantly different in Hotchkiss. One of ordinary skill in the art would have no reason to make this combination.

(b) Claims 103, 106, and 137-138 are rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 3,986,845 to Hotchkiss in view of U.S. Patent No. 5,580,360 to Pool.

Pool does not cure the deficiencies of Hotchkiss. All arguments made above are hereby incorporated into this section. Claim 103 has been cancelled to expedite prosecution. Claim 106 has been rewritten into independent form.

At page 4 of the Office Action, the Examiner states, with respect to Pool:

Further, the assembly includes a cover with a plurality of aligned slits, through which the blades are aligned with and extend through and protrude from the slits. It is the examiner's position that the cover acts as the instant claimed "guide plate".

...

It would have been obvious to one of ordinary skill in the art at the time of invention by applicant to utilize the cover of Pool as a guide plate in the assembly of Hotchkiss in order to allow proper alignment of the knives.

Claims 106 and 138 each explicitly require the following:

- (a) a lower guide plate which includes a plurality of slots through which said first cutting edges of said lower circular blades extend therethrough; and
- (b) an upper guide plate which includes a plurality of slots through which said second cutting edges of said upper circular blades extend therethrough, wherein said lower guide plate and said upper guide plate form a channel therebetween for receiving and aligning waxed corrugated cardboard sheets for cutting by the circular blades.

That is, these claims each require two guide plates, one for the cutting edges of the lower circular blades, and another for the cutting edges of the upper circular blades. The space between the two guide plates is a channel through which the cardboard

sheets are received and aligned for cutting. Pool does not disclose the guide plates of the instant invention, as claimed.

Pool discloses a “slitter assembly”, which is made up of a “lower assembly” and an “upper slitter assembly” (col. 2, ll. 50-54) having a gap therebetween. Slitter blades (46) are contained in the lower assembly. No blades are contained in the upper assembly. The upper assembly includes a cover (46a) having slits (46b) through which the slitter blades (46) protrude. The lower assembly contains no cover. Thus, Pool discloses an assembly having a single set of cutting blades on one half and a cover with slits on the other half, and does not disclose upper and lower guide plates forming a channel therebetween.

As to the combination, in Hotchkiss, belts and pulleys are located between the circular knives. See, for example, Figures 3 and 4 of Hotchkiss, which shows the belts (44, 46) and pulleys (48, 50) in relation to the circular knives (52, 54). These belts and pulleys are used to guide the cardboard through the Hotchkiss apparatus. So much of Hotchkiss is directed to the mechanisms for guiding the cardboard through the apparatus that there is no need for any further additions, such as “guide plates”, as used in the instant invention as claimed.

In addition, these belts and pulleys in Hotchkiss define the spacing of the circular knives, and there would be no need to add anything further to Hotchkiss “to allow proper alignment of the knives”. Moreover, the addition of a “cover”, such as that in Pool, would in fact cover the belts that are intended to move the material along its path. No advantage could be obtained by modifying Hotchkiss in this manner.

3. Amendments Made Without Prejudice or Estoppel.

Notwithstanding the amendments made and accompanying traversing remarks provided above, Applicants have made these amendments in order to expedite allowance of the currently pending subject matter. However, Applicants do not acquiesce in the original ground for rejection with respect to the original form of these claims. These amendments have been made without any prejudice, waiver, or

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estoppel, and without forfeiture or dedication to the public, with respect to the original subject matter of the claims as originally filed or in their form immediately preceding these amendments. Applicants reserve the right to pursue the original scope of these claims in the future, such as through continuation practice, for example.

4. Conclusion.

Based on the foregoing, Applicants respectfully request that the various grounds for rejection in the Office Action be reconsidered and withdrawn with respect to the presently amended form of the claims, and that a Notice of Allowance be issued for the present application to pass to issuance.

In the event any further matters remain at issue with respect to the present application, Applicants respectfully request that the Examiner please contact the undersigned below at the telephone number indicated in order to discuss such matter prior to the next action on the merits of this application.

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Respectfully submitted,



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